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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/938,218	08/23/2001	Allan S. Gengler		1702

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EXAMINER

BATSON, VICTOR D

ART UNIT	PAPER NUMBER
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3671

DATE MAILED: 02/15/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/938,218

Applicant(s)
GENGLER ET AL.

Examiner
Victor Batson

Art Unit
3671



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6-10, 16-20, and 24-37 is/are allowed.
- 6) ☒ Claim(s) 1-5, 11-15, 21-23, and 38-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 2
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____

Reissue Applications

1. This reissue application was filed without the required offer to surrender the original patent or, if the original is lost or inaccessible, an affidavit or declaration to that effect. The original patent, or an affidavit or declaration as to loss or inaccessibility of the original patent, must be received before this reissue application can be allowed. See 37 CFR 1.178.

Claim Rejections - 35 USC § 112

2. Claims 38-44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 38 line 9, "the disc blade" lacks proper antecedent basis.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims ~~1, 4, 11, 14, 15, 21~~ are rejected under 35 U.S.C. 103(a) as being unpatentable over Deere & Co. Parts drawing in view of Bierl et al. (5,042,590).

Deere & Co. Parts drawing discloses an individual disc mounting system including a leaf spring 14, a mounting apparatus attaching an upper leg of the leaf spring to the implement, a disc spindle apparatus attached to the leaf spring lower leg, and a disc blade positioned alongside a portion of the leaf spring lower leg. Deere & Co. Parts drawing however lacks the leaf spring being generally U-shaped.

Bierl et al. teaches that it is known in the agricultural art to mount discs to generally U-shaped leaf springs.

Therefore, Deere & Co. Parts drawing discloses the claimed invention except that a generally V-shaped leaf spring is used instead of a generally U-shaped leaf spring. Bierl et al. shows that a generally U-shaped leaf spring is an equivalent structure known in the art. Therefore, because these two spring means were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute a U-shaped leaf spring for a V-shaped leaf spring.

Concerning claim 21, the combination renders the claimed method steps obvious since such would be logical manner of using the combination.

Additionally, regarding the U-shaped leaf spring, it is noted that it has been held that "There is no invention in merely changing the shape or form of an article without changing its function except in a design patent." Eskimo Pie Corp. v. Levous et al, 3 USPQ 23.

5. Claims ~~2, 8, 12, 13, 22, 23~~ are rejected under 35 U.S.C. 103(a) as being unpatentable over Deere & Co. Parts drawing in view of Bierl et al. (5,042,590) as applied to claims 1, 4, 11, 14, 15, 21 above, and further in view of Miguet et al. (4,452,319).

Deere & Co. Parts drawing as modified by Bierl et al., discloses an individual disc mounting system as disclosed previously, but lacks specifying the discs being canted at an angle.

Miguet et al. teaches that it is known in the art for discs to be canted at an angle from the horizontal as shown in figures 1 & 2. Canting agricultural discs provides better cultivation of the soil and a larger furrow to be formed.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to cant the discs of Deere & Co. Parts drawing at an angle from horizontal as taught by Miguet et al., for better cultivation.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to angle the discs at an

angle within the range of 3 to 13 degrees and approximately at an angle of 8 degrees, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

6. Claims ~~1,4,11,14,15,21~~, 38, 40, 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bierl et al. (5,042,590) in view of Deere & Co. Parts drawing.

Bierl et al. discloses a disc mounting system for an agricultural implement including a leaf spring with an upper leg and a lower leg, with a mounting apparatus configured to attach the upper leg to the implement, and a disc spindle apparatus attached to the leaf spring lower leg such that the disc spindle apparatus extends outward from the lower leg in a direction generally transverse to the lower leg bottom surface as shown in figure 2. Bierl et al. however lacks the mounting system being used to mount individual discs.

Deere & Co. Parts drawing teaches that it is known in the art to use leaf springs to mount individual discs. Mounting agricultural discs individually, allows an individual disc to be deflected if an obstacle is encountered, instead of causing an entire disc gang to be deflected.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the

apparatus of Bierl et al., by mounting the discs individually on leaf springs so that an individual disc is deflected instead of an entire disc gang if an obstacle is encountered.

7. Claims ~~2,3~~, 12, 13, ~~22,23~~, 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bierl et al. (5,042,590) in view of Deere & Co. Parts drawing as applied to claims 1, 4, 11, 14, 15, 21, 38, 40, 43 above, and further in view of Miguet et al. (4,452,319).

Bierl et al. as modified by Deere & Co. Parts drawing, discloses an individual disc mounting system as disclosed previously, but lacks specifying the discs being canted at an angle.

Miguet et al. teaches that it is known in the art for discs to be canted at an angle from the horizontal as shown in figures 1 & 2. Canting agricultural discs provides better cultivation of the soil and a larger furrow to be formed.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to cant the discs of Bierl et al. at an angle from horizontal as taught by Miguet et al., for better cultivation.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to angle the discs at an angle within the range of 3 to 13 degrees and approximately at an

angle of 8 degrees, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

8. Claims 41,42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bierl et al. (5,042,590) in view of Deere & Co. Parts drawing as applied to claims 1,4,11,14,15,21,38,40,43 above, and further in view of Van Mill (5,590,721).

Bierl et al. as modified by Deere & Co. Parts drawing, discloses a disc gang with an individual disc mounting system as disclosed previously, but lacks disclosing that the disc gang is used with an implement including a plurality of ground working tools having ripper shanks positioned intermediate the first and second disc gang.

Van Mill teaches that it is known to use disc gangs with an implement having ripper shanks positioned intermediate first and second disc gangs. The implement disclosed by Van Mill is a conservation tillage tool that is used in no-till operations

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the mounting system and disc gang of Bierl et al. as modified by Deere & Co., with an implement similar to Van Mill to provide a conservation tillage tool that can be used in no-till operations.

Allowable Subject Matter

9. Claims 6-10,16-20,24-37 are allowed.

10. Claim 44 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

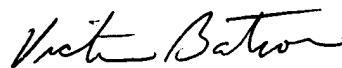
11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art of record discloses various agricultural systems.

Inquiries

12. Any inquiry concerning this communication should be directed to Examiner Victor Batson whose telephone number is (703) 305-6356. The examiner can be normally reached Monday through Friday (except Wednesday) from 7:00 am to 5:00 pm, Eastern Standard Time.

13. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Will, can be reached on (703) 308-3870. The fax phone number for this Group is (703) 305-7687.

February 8, 2002


Victor Batson
Primary Examiner
Art Unit 3671